



UNITED STATES PATENT AND TRADEMARK OFFICE

cm
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,376	11/17/2003	Niall D. McDonnell	10559-910001 / P18019	4375
20985	7590	08/20/2007		
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER PHAM, BRENDA H	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 08/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/716,376

Applicant(s)

MCDONNELL, NIALL D.

Examiner

Brenda Pham

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-27 is/are rejected.
- 7) ☐ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-30 are pending in the application. Claims 28-30 are withdrawn from consideration.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 11-16, "A computer product or article of manufacture" is non-statutory subject matter.

Regarding claims 17-22, "A computer program product, tangibly embodied in an information carrier, for executing instructions on a processor, the computer program product being operable to cause a machine to:" is non-statutory subject matter.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware

Art Unit: 2616

components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer program claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer program do not defined any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F 3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2616

5. Claims 1, 3, 11, 17, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by **Simpkins et al (US 6,931,002 B1)**.

Regarding claims 1, 3, 11, 13, 17, 19 and 23 and 24 **Simpkins et al** disclose system and method comprising (referring to figure 6):

receiving frames partitioned into multiple timeslots (28, 29);

reading a timeslot lookup table including an entry that specifies an assignment corresponding to a timeslot (**TSI control function 43 for reading address of the shared memory for a TDM packet and the packet switch control function 44 for reading the address of the input time slot for a packet logical port**); and

storing data associated with a particular timeslot in a memory location based on the assignment, with data from a particular channel included in timeslots having a data assignment stored in contiguous memory locations.

Simpkins et al teach, “if the input time slot belongs to a TDM logical port, the address of the shared memory 40 is selected from the TSI control function 43. If the input time slot belongs to a packet logical port, the address of the shared memory 40 is selected from the packet switch control function 44.” (col. 7, line 10-45).

Regarding claims 2, 6, 12, 14 and 18, 20, 25, **Simpkins et al** further teach wherein the assignments include a voice timeslot, an unassigned timeslot, and a data timeslot (see figure 7, col. 6-7, line 60-67, 1-10, respectively).

8,

Regarding claims 7, 15, 16, 21, 22, 26, 27, **Simpkins et al** further teach wherein storing the data comprises:

storing the data included associated with voice timeslots in a first memory (31 of figure 5);

storing the data associated with data timeslots in a second memory (32 of figure 5); and

discarding the data associated with unassigned timeslots ("**A null DEU carries no data, but serves as a placeholder in the port module interface frame. If the time slot is found to contain a packet DEU, the DEU will be enqueued...If the DUE is found to contain a null DUE, the DUE will be discarded**" (see col. 8, line 37-45).

Note: Examiner does not give patentable weight to "configured to" clauses because such language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation (see claims 23-27).

Allowable Subject Matter

6. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record fails to teach in combination wherein calculating the number of timeslots includes locating a start-point and an end-point of consecutive channels in a frame having the same assignment.

Art Unit: 2616

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

August 13, 2007

Brenda Pham

A handwritten signature in cursive script that reads "Brenda Pham".

BRENDA PHAM
PRIMARY EXAMINER